

AMENDMENTS TO THE CLAIMS

For the Examiner's convenience, all pending claims are included below.

1. (Cancelled) A sensor device, comprising:
a sensor element configured to monitor in vivo a physiological parameter associated with a patient; and
a plurality of imageable marker properties including a first imageable marker property to be imaged using a KV imager and a second imageable marker property to be imaged using a MV imager.
2. (Cancelled) The sensor device of claim 1, wherein the plurality of imageable marker properties comprises a plurality of markers disposed on the sensor device.
3. (Cancelled) The sensor device of claim 2, wherein the plurality of markers is disposed on the sensor device in a manner to discern an orientation of the sensor device.
4. (Cancelled) The sensor device of claim 3, wherein the plurality of markers is disposed along a length of the sensor device.
5. (Cancelled) The sensor device of claim 2, wherein at least one of the plurality of markers can be imaged in at least two imaging modalities.
6. (Cancelled) The sensor device of claim 1, further comprising a casing having the plurality of imageable marker properties integrated therewith.
7. (Cancelled) The sensor device of claim 6, wherein the plurality of imageable marker properties are integrated in the casing in a manner to discern an orientation of the sensor device.
8. (Cancelled) The sensor device of claim 7, wherein at least one of the plurality of imageable marker properties is imageable in at least two imaging modalities.

9. (Cancelled) The sensor device of claim 4, wherein the length is less than approximately 26 millimeters.
10. (Cancelled) The sensor device of claim 4, wherein the length is less than approximately 20 millimeters.
11. (Cancelled) The sensor device of claim 1, wherein the plurality of imageable marker properties comprises a plurality of markers disposed in the sensor device.
12. (Cancelled) A method, comprising:
implanting a sensor device having an imageable marker property in a body; and
discerning an orientation of the sensor device in the body using an imaging technique, wherein the imageable marker property comprises a pattern from which orientation can be determined.
13. (Cancelled) The method of claim 12, wherein the sensor device comprises a plurality of imageable marker properties, and wherein the plurality of imageable marker properties comprise a plurality of markers disposed on the sensor device in a pattern to discern an orientation of the sensor device and wherein discerning comprises imaging the plurality of marker properties.
14. (Cancelled) The method of claim 13, wherein the plurality of imageable marker properties are disposed along a dimension of the sensor device and wherein discerning further comprising displaying each of the plurality of imaged marker properties.
15. (Previously presented) A method, comprising:
situating a sensor device in a body; and
identifying a position of the sensor device relative to an internal coordinate system using an imaging technique, wherein the internal coordinate system is based on a plurality of markers located in the body having an imageable marker property, and

wherein identifying comprises identifying the position relative to at least one of the plurality of markers.

16. (Original) The method of claim 15, wherein situating comprises implanting the sensor device in the body.

17. (Original) The method of claim 16, wherein implanting comprises injecting the sensor device in the body.

18. (Original) The method of claim 15, wherein the sensor device has a length less than approximately 26 millimeters.

19. (Original) The method of claim 15, further comprising identifying the position relative to an anatomical landmark.

20. (Original) The method of claim 15, further comprising identifying the position relative to an organ.

21. (Original) The method of claim 15, further comprising tracking the position of the sensor device over time.

22. (Canceled).

23. (Canceled).

24. (Original) The method of claim 15, further comprising monitoring in vivo at least one physiological parameter of the body.

25. (Cancelled) A method, comprising:
situating a sensor device in a body; and
identifying a position of the sensor device relative to an internal coordinate system using an imaging technique, wherein identifying comprises:

imaging a plurality of markers and the sensor device in a first imaging modality;

relating the position of the sensor device relative to at least one of the plurality of markers;

imaging the plurality of markers in a second imaging modality, wherein the sensor device is not imageable in the second modality; and

determining the position of the sensor device in the coordinate system based on the relating.

26. (Cancelled) The method of claim 15, wherein the sensor device comprises one or more sensor elements and wherein the method further comprises determining the position of at least one of the sensor elements relative to the internal coordinate system using the imaging technique.

27. (Cancelled) An apparatus, comprising:

means for monitoring in vivo at least one physiological parameter of the body;

means for providing telemetry regarding the monitored in vivo at least one physiological parameter; and

means for identifying a position of the means for monitoring relative to an in vivo coordinate system with an imaging technique and a plurality of imageable marker properties.

28. (Cancelled) The apparatus of claim 27, further comprising means for establishing the in vivo coordinate system.

29. (Cancelled) The apparatus of claim 28, wherein the means for identifying comprises means for correlating the position of the means for monitoring with the in vivo coordinate system.

30. (Cancelled) The apparatus of claim 27, further comprising means for determining an orientation of the means for monitoring.

31. (Previously presented) A method, comprising:
 - monitoring in vivo at least one parameter associated with a body;
 - imaging a plurality of markers and an in vivo landmark in a first imaging modality;
 - correlating a position of the in vivo landmark relative to at least one of the plurality of markers;
 - imaging the plurality of markers in a second modality, wherein the in vivo landmark is not imageable in the second modality; and
 - determining the position of the in vivo landmark relative to at least one of the plurality of markers based on the correlating.
32. (Original) The method of claim 31, wherein the in vivo landmark is an anatomical landmark.
33. (Original) The method of claim 31, wherein the in vivo landmark is a sensor device.
34. (Original) The method of claim 33, wherein the sensor device comprises at least one of the plurality of markers.
35. (Original) The method of claim 31, wherein the first modality is CT imaging.
36. (Original) The method of claim 35, wherein the second modality is ultrasound imaging.
37. (Original) The method of claim 35, wherein the second modality is MV imaging.
38. (Original) The method of claim 35, wherein the second modality is kV imaging.
39. (Original) The method of claim 31, wherein the first modality is magnetic resonance imaging.

40. (Original) The method of claim 39, wherein the second modality is MV imaging.
41. (Original) The method of claim 39, wherein the second modality is kV imaging.
42. (Original) The method of claim 39, wherein the second modality is ultrasound imaging.
43. (Previously presented) The method of claim 15, further comprising implanting the sensor through injection.
44. (Cancelled) A method, comprising:
 - adding an imageable property to a sensor device to make it imageable;
 - implanting the sensor device having the plurality of imageable marker properties in a body; and
 - discerning a location and an orientation of the sensor device in the body using an imaging technique.
45. (Cancelled) The method of claim 44, wherein adding the imageable property further comprises:
 - adding a first imageable marker property to be imaged using a KV imager and
 - adding a second imageable marker property to be imaged using a MV portal imager.
46. (Cancelled) The method of claim 44, wherein adding the imageable property further comprises:
 - adding a plurality of markers disposed on the sensor device.
47. (Cancelled) The method of claim 44, wherein adding the imageable property further comprises:
 - adding a plurality of markers disposed on the sensor device in a manner to discern an orientation of the sensor device, and further comprising discerning an orientation of the sensor device using an imaging technique.

48. (Cancelled) A method, comprising:

implanting in a body a first device configured to monitor in vivo a parameter associated with a patient;

providing a drug enclosed in at least one of the first device and a second device; and

releasing the drug in response to a signal received by the first device.

49. (Cancelled) The method of claim 48, further comprising:

providing an imageable marker property with the first device and discerning a location of the first device in the body using an imaging technique.

50. (Cancelled) The method of claim 48, wherein releasing comprises producing a secondary local signal with the first device that causes release of a drug that is encapsulated in the second device.

51. (Cancelled) The method of claim 48, further comprising:

the sensor device responding to external signals or responding to an internally received signal based on the monitored in vivo at least one physiological parameter.

52. (Cancelled) The method of claim 48, further comprising adding an first imageable marker property to the first device.